The Effect of Work Ability, Motivation And Physical Work Environment on Employee Productivity PT. Andhika Pratama Jaya
Abadi Deli Serdang

Adjie Rahim Ramadhan ¹ Toni Hidayat ²
¹,² Faculty of Economics, Universitas Muslim Nusantara Al-Washliyah Medan
Email: wombadjie@gmail.com¹ tonirestu98@gmail.com²

Abstract
This study aims to determine: 1) the effect of work ability on employee productivity, 2) the effect of motivation on employee productivity, 3) the effect of the physical work environment on employee productivity, and 4) the influence of work ability, motivation, and the physical work environment simultaneously on employee productivity at PT. Andhika Pratama Jaya Abadi Deli Serdang The type of research used is quantitative research. The data used is primary data. The population is as many as 50 people and the sampling technique uses saturated samples where the entire population is used as respondents in the study. The analysis used the classical assumption test analysis method, multiple linear regression analysis, hypothesis testing and the coefficient of determination. The results concluded that work ability has a significant influence on employee productivity with a significance level of 0.017. Motivation has a significant effect on employee productivity with a significance level of 0.001. The physical work environment has a significant effect on employee productivity with a significance level of 0.034. Workability, motivation, and the physical work environment simultaneously have a significant effect on employee productivity at PT. Andhika Pratama Jaya Abadi Deli Serdang with a significance level of 0.000.

Keywords: Ability, Motivation, Physical Work Environment, And Employee Productivity.

Introduction
An organization, whether a company or an organization must experience problems regarding human resources. The main challenge for every company is the management of its human resources because human resources are a component of controlling the organization, maintaining and developing the organization to resolve various demands and developments of the times. The increasing competition in the business world requires companies to re-examine their company's productivity measures because existing productivity measures are deemed less effective. Good working environment conditions are also one of the factors supporting employee productivity which in turn has an impact on increasing employee productivity levels.

A working environment condition is said to be good or appropriate if the people in it can carry out their activities in an optimal, healthy, safe, and comfortable way. The suitability of the work environment can have an impact in the long term, as well as a bad work environment will make it difficult to obtain an effective and efficient work system, which affects productivity.

Based on the description above, it can be understood that work ability, work motivation and physical work environment are thought to increase employee productivity. This has been proven from previous research by Arini, Mukzam, and Ruhana that shows that work ability and work motivation. The conclusion is that work ability and work motivation partially affect employee productivity. Furthermore, research by Rahmawanti, Swasto, Prasetya shows the results of multiple linear regression analysis, partially the physical work environment has a significant influence on employee productivity and the physical work environment also has a significant influence on employee productivity.

Associated with the lack of a given, then in this study researchers are interested in wanting to highlight aspects of the productivity of employees of PT. Andhika Pratama Jaya Abadi Deli Serdang,
researchers want to know how the level of employee ability, employee motivation level, productivity level and work environment of PT. Andhika Pratama Jaya Abadi Deli Serdang. Because one of the benchmarks for employee productivity is service, if the service provided by employees to customers is good then employee productivity is also good, but employee productivity at this time can be said to be less than optimal because there are still many complaints received from the community. PT. Andhika Pratama Jaya Abadi Deli Serdang always strives to continuously improve the productivity of their employees in order to be able to achieve company goals. Therefore, company leaders must know what factors will increase the productivity of their employees. Many factors affect employee productivity including leadership, ability, motivation, physical work environment, organizational culture, job satisfaction, work discipline. According to Mangkunegara, there are two things that can affect employee productivity, namely Ability and Motivation. Work ability relates to knowledge, talents, interests and experience in order to be able to complete tasks that are in accordance with the work they occupy.

![Chart 1.1 Pre-Survey Data on Employee Productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang](image)

**Chart 1.1**

**Pre-Survey Data on Employee Productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang**

From the results of the pre-survey that the author conducted on 20 employees of PT. Andhika Pratama Jaya Abadi Deli Serdang, obtained the following data:

1. There are still problems with the ability variable, namely 20% on the perception speed indicator.
2. There are still problems with the motivation variable, which is 30% on the indicator of the need for appreciation.
3. There are still problems with the physical work environment variable, which is 10% on the work safety indicator.
4. There are still problems with the employee productivity variable, which is 30% on the punctuality indicator.

Based on description on so researcher interested for To do study with title Influence Work Ability, Motivation and Physical work environment on employee productivity Study on employees
PT. Andhika Pratama Jaya Abadi Deli Serdang. Based on background behind problem the so problem whichin formulate in this research is as follows :

1. is ability take effect to productivity employee PT. Andhika Pratama Jaya Abadi Deli Serdang ?
2. is motivation take effect to productivity employee PT. Andhika Pratama Jaya Abadi Deli Serdang ?
3. is environment work take effect to productivity employee PT. Andhika Pratama Jaya Abadi Deli Serdang?
4. How much influence work ability, motivation and physical work environment affect employee productivity?
5. How big is the influence of motivational work ability and physical work environment on employee productivity?

Based on the formulation of the problem on so destination this researchis :

1. For knowing influence ability to productivity employeePT. Andhika Pratama Jaya Abadi Deli Serdang.
2. For knowing influence motivation to productivity employee PT. Andhika Pratama Jaya Abadi Deli Serdang.
3. For knowing influence environment work to productivity employee PT. Andhika Pratama Jaya Abadi Deli Serdang.
4. To find out how much work ability, motivation and physical work environment affect employee productivity.
5. How much to know the motivational work ability and physical work environment on employee productivity.

**Methodology**

Design Study must specific, clear and detailed, firmly determined from the start, becomes the guide step for the sake of step". Method study quantitative is as method study which used for research on the population or specific sample. This study discusses "The Influence of Work Ability Motivation and Work Environment on Employee Productivity at PT. Andhika Pratama Jaya Abadi Deli Serdang in Bangun Rejo Village, Dusun VI No. 610 Tanjung Morawa Deli Serdang". be equipped with address company. As for location study this held in PT. Andhika Pratama Jaya Abadi Deli Serdang in Bangun Rejo Village, Hamlet VI No.610, Tanjung Morawa District, Deli Serdang.

The population of this study were 80 employees of PT. Andhika Pratama Jaya Abadi Deli Serdang. Data the taken on November 2021 from sourcecompany personnel data Located at PT. Andhika Pratama Jaya Abadi Deli Serdang Bangun Rejo Village, Hamlet VI No. 610, Tanjung Morawa District, Deli Serdang.

Thing this could because amount population which too big for writer. Election sample with method which appropriate could describe condition accurate real population, and can save cost effectively. The sampling technique of this study used a full sampling technique, namelysampling technique by taking the entire population as respondents are as many as 20 employees at PT. Andhika Pratama Jaya Abadi Deli Serdang. In collecting Research Instruments, researchers docollection data source in form data primary and data secondary.

**Research Results and Discussion**

Test reliability is something size stability and consistent respondents in answering matters relating to statements that is something variable and arranged in form questionnaire. Test reliability can be done jointly on the question items for more than one variable. As for the basis of decision
making is an instrument consisting of several statement items could trusted or reliable if score Cronbach alpha on 0.70 (Ghozali, 2016:47-48). The following are the results of reliability testing for the variable Ability Work, Motivation Work, Environment Work, and Performance Employee is as follows.

**Test Reliability Ability Work (X₁)**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.757</td>
</tr>
</tbody>
</table>

Source: Data primary which processed, 2022

From the output of reliability testing using SPSS in above, it can be seen that the alpha value of the variable X₁ (Ability Work) is equal to 0.757. The value of Cronbach's Alpha variable X₁ > 0.70, So data which generated from questionnaire about ability the work said reliable. With thereby could concluded that research data variable X₁ is reliable or could trusted.

**Test Reliability Motivation Work (X₂)**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.754</td>
</tr>
</tbody>
</table>

Source: Data primary which processed, 2022

From the output of reliability testing using SPSS in above, it can be seen that the alpha value of the variable X₂ (Work Motivation) is 0.754. The value of Cronbach's Alpha variable X₁ > 0.70, so the data The results from the questionnaire about work motivation are said to be reliable. With thereby could concluded that data study variable X₂ is reliable or can trusted.

**Test Reliability Environment Work (X₃)**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.733</td>
</tr>
</tbody>
</table>

Source: Data primary which processed, 2022

From the output of reliability testing using SPSS in above, it can be seen that the alpha value of the variable X₃ (Environment Work) is 0.733. The value of Cronbach's Alpha variable X₃ > 0.70, So data which generated from questionnaire about environment the work said reliable. With thereby could concluded that research data variable X₃ is reliable or could trusted.
Test Reliability Productivity Employee (Y)

Table 4
Test Reliability Variable Performance Employee

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>0.773</td>
</tr>
<tr>
<td>N of Items</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Data primary which processed, 2022

From the output of reliability testing using SPSS in above, it can be seen that the alpha value of the Y variable (Employee Productivity) is 0.773. The value of Cronbach's Alpha variable Y > 0.70, so the data which generated from questionnaire about Employee productivity the said reliable. With thereby could concluded that data study variable Y is reliable or can be trusted.

Results Test Assumption Classic

A good regression model is a regression model that satisfies assumption classic, that is: normality, multicollinearity, heteroscedasticity and autocorrelation before testing the hypothesis. Here are the results of the assumption test classic which carried out this research.

Test Normality

Test normality data aim for test is variable confounders or residuals have a normal distribution or not. For test is in model regression, variable dependent Employee Productivity and variable independent that is Ability Work, Motivation Work, and Physical Work Environment has a normal distribution or not. One of the ways the easiest way to see the normality of the residuals is to look at the graph histogram which compare Among data observation with distribution which close to a normal distribution.

Normality test research using histogram graphs and curve deployment P-Plot, which described as follows.

![Picture 1](image_url)

**Results Test Normality Point Diagonal**

Based on the normal PP Plot graph above, it can be seen that the point spread around line diagonal and the spread follow line diagonal, so it can be said that the distribution pattern is normal. Chart in on show that model regression influence Ability Work, Motivation Work, and Environment Physical Work to Employee Productivity on PT. Andhika Pratama Jaya Abadi Deli Serdang in this study can used because it satisfies the assumption of normality. This result is supported by Kolmogorov-Smirnov normality test, the significance value is greater than 0.05 then
data is normally distributed.

### Table 5
**Test Normality Kolmogorov-Smirnov**

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>Normal Parameters a,b</td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>.0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>2.59637732</td>
</tr>
<tr>
<td>most Extreme Differences</td>
<td>Absolute, .123</td>
</tr>
<tr>
<td>Positive</td>
<td>.065</td>
</tr>
<tr>
<td>negative</td>
<td>-.123</td>
</tr>
<tr>
<td>Test Statistics</td>
<td>.123</td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
<td>.056 c,d</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Data primary which processed, 2022

Based on table 5 test normality with kolmogorov-smirnov obtained score asymp. Sig as big as 0.056 more big from 0.05 so concluded the data normally distributed.

### Test Multicolonierity

This test is intended to detect symptoms of correlation between variables one independent variable with another independent variable. On model regression which good should no there is correlation in Among variable independent. Wrong one method for To do test multicollinearity namely by looking at the value of VIF (Variance Inflation Factors). If VIF value > 10 then multicollinearity occurs. Multicollinearity-free regression model has a VIF value < 10 and has a number tolerance > 0.1 or close to 1.

Based on the multicollinearity test, it was found that the ability Work, Motivation, and Physical Work Environment free from multicollinearity which indicated by score tolerance > 0.10 or VIF value < 10.

### Table 6
**Test Multicolonierity**

<table>
<thead>
<tr>
<th>Coefficients a</th>
<th>Collinearity Statistics</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Tolerance</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability Work</td>
<td>.706</td>
<td>1.416</td>
</tr>
<tr>
<td>Motivation Work</td>
<td>.737</td>
<td>1.356</td>
</tr>
<tr>
<td>Environment Work</td>
<td>.652</td>
<td>1.535</td>
</tr>
</tbody>
</table>

a. Dependent Variables: Employee Productivity

Source: Data primary which processed, 2022
Based on table 6 results test multicollinearity on part Collinearity Statistics seen for third variable independent, number Tolerance that is Ability Work as big as 0.706 more greater than 0.10, Motivation of 0.737 is greater than 0.10, and Physical Work Environment of 0.652 is greater than 0.10. While the VIF value of Workability 1.416 is smaller than 10, motivation is 1.356 smaller than 10, and the Physical Work Environment is 1.535 less than 10. Thus the results do not exceed the limits of the Tolerance and VIF values that are allowed, so could concluded that model regression which generated no there is problem multicollinearity.

**Test Heteroscedasticity**

Heteroscedasticity test aims to test whether in the regression model occur inequality variance from residual one observation to another observation. If the variance is constant, then homoscedasticity occurs and if they are different then there is a heteroscedasticity problem. Regression model which good that is homoscedasticity or no occur heteroscedasticity.

One way to find out whether there is heteroscedasticity in a multiple linear regression model by looking at the scatterplot graph between the predicted value of the dependent variable, namely SRESID with residual error namely ZPRED. If there is no specific pattern and the point spreads above and under number 0 on the axis Y, then it doesn't happen heteroscedasticity. Chart scatterplot on research this showed on chart following:

![Scatterplot](image)

**Results Test Heteroscedasticity Scatterplot**

Judging from the scatterplot graph that the dots spread randomly and spread both above and below the number 0 on the Y axis. With thereby declared that model regression this no occur symptom heteroscedasticity. The influence of work ability on employee productivity at PT. Andhika Pratama Jaya Abadi Deli Serdang. Results study show that ability work have significant influence on employee performance. Proven from hypothesis testing simple linear regression obtained the value of F = 0.000 <0.05, then the hypothesis first (H$_1$) received. Whereas from results analysis linear multiple obtained the significance value of t arithmetic variable X$_1$ that is equal to 0.017 <0.05 so first hypothesis (H$_1$) is accepted.

Results analysis regression linear multiple show Variable Ability Work, Motivation and Environment Physical Work have influence significant by simultaneous to Employee Productivity. Results F test analysis obtained a significance value of 0.000 F. Therefore because 0.000 > 0.05, then the fourth hypothesis (H$_4$) is accepted. So can concluded that ability work, motivation and Physical work environment. by simultaneous (simultaneously) take effect significant to employee productivity. Based on the coefficient of determination (Adjusted R Square) of 0.547 or 54.7%, indicating that work ability, motivation and environment physical work take effect significant to employee productivity by 54.7%. While the remaining 45.3% is influenced by factors other which no explained in research this.
Conclusions

Based on results study and processing data which has conducted, so could concluded as follows:

1. Work ability partially has a significant influence on employee productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang.
2. Motivation by Partial have influence significant to employee productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang.
3. The physical work environment partially has a significant influence to employee productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang. Work ability, work motivation, and work environment simultaneously have influence significant employee productivity of PT. Andhika Pratama Jaya Abadi Deli Serdang.

Reference

GANTA .NC (2014). Motivation In The Workplace To Improve The Employee Performance . www.ijetmas.com Volume 2 Issue 6, ISSN 2349-4476
Ghozali, Imam. 2016. Application of Multivariate Analysis With IBM SPSS 2 Program. Diponegoro University Semarang
Kusuma Ardana (2014) The Effect of Placement and Compensation on Employee Job Satisfaction According to Winardi (2014), "the ability" is a nature (which attached on man or which studied)
Robbins, & Judge. 2014. ability intellectual ( intellectual abilities) . Jakarta: Four Salemba
Syarifadila Novi (2012) The Effect of Work Environment and Employee Development on Employee Performance at PT. Carsurindo Supermentendent Medan